

We claim:

1. A process for cleaning an evaporative burner comprising  
activating a heating arrangement (72) so that deposits on a wall surrounding a combustion chamber (52) are heated to a temperature at least equal to a region of a burning-off temperature of the deposits, and thereby burning off the deposits.
2. The cleaning process according to claim 1, further comprising carrying out the cleaning process when an evaporative burner is in a non-heating operation state.
3. The cleaning process according to claim 2, further comprising carrying out the cleaning process following a heating operation state phase of the evaporative burner.
4. The cleaning process according to claim 1, further comprising carrying out the cleaning process after a predetermined operating duration of an evaporative burner.
5. The cleaning process according to claim 1, further comprising carrying out the cleaning process when the heating arrangement (72) is driven with a mark/space ratio of less than unity.
6. An evaporative burner, further comprising an evaporative burner, comprising:  
a combustion chamber,  
an evaporative medium (34) for feeding fuel vapor into the combustion chamber (52),  
a first heating device (70) with a heating region, including at least one ignition heating element (70) for ignition of fuel vapor present in the combustion chamber (52), the first heating device projecting with at least its heating region into the combustion chamber (52),  
a second heating device (72), including at least one evaporating heating element (72) associated with the evaporative medium (34) for affecting its evaporation characteristic, and  
a control device by which heating power of at least the second heating device (72) is adjusted, and a monitoring module that monitors the heating power or the required heating power

of the second heating device (72) and senses the presence of evaporation of fuel, depending on the result of monitoring.

7. The evaporative burner according to claim 6, wherein the at least one evaporating heating element (72) comprises an electrically operated heating element having an electrical resistance that rises with increasing temperature.

8. A process for monitoring a fuel supply to an evaporative burner, wherein an evaporative burner has a heating device (72) that supports evaporation of fuel, comprising determining whether evaporation of fuel is present in a combustion chamber (52) of the evaporative burner (10) depending on at least one of the following:

- heating power of the heating device (72),
- a change in the heating power of the heating device (72), and
- a required change in the heating power of the heating device (72).

9. The process according to claim 8, further comprising sensing the presence of evaporation of fuel by at least one of the following:

- rising heating power, and
- required higher heating power during operation of the heating device (72).

10. The process according to claim 8, further comprising:

- for an ignition process of the evaporative burner, operating the heating device (72) in a first operating phase with higher heating power in a region of a maximum heating power,
- in a subsequent, second operating phase, operating the heating device (72) with decreasing heating power,

in a third operating phase, operating the heating device (72) with a heating power that is raised again and is increasing, and detecting the presence of fuel evaporation at or after the transition into the third operating phase.

11. The process according to claim 8, further comprising activating a heating device (72) that supports ignition of evaporated fuel when a presence of the evaporation of fuel is detected.

12. The process according to claim 8, further comprising:  
activating the heating device (72) that supports evaporation in an operating phase in which a combustion operation of the evaporative burner is adjusted, and  
sensing that fuel evaporation is no longer present depending on a reduction of the heating power.

13. An evaporative burner, comprising:  
a combustion chamber,  
an evaporative medium (34) for feeding fuel vapor into the combustion chamber (52),  
a first heating device (70) with a heating region, including at least one ignition heating element (70) for ignition of fuel vapor present in the combustion chamber (52), the first heating device projecting with at least its heating region into the combustion chamber (52),  
a second heating device (72), including at least one evaporating heating element (72) associated with the evaporative medium (34) for affecting its evaporation characteristic, and  
a cleaning device (100) for removal of deposits that are deposited in a region of the combustion chamber (52) during combustion operation.

14. The evaporative burner according to claim 13, wherein the cleaning arrangement comprises a heating arrangement (72) that produces a temperature in the region of, or above, a burning-off temperature of the deposits.